The San Diego Regional Energy Academy

May 2026

SAN DIEGO REGIONAL ENERGY ACADEMY

Program Administrators

EPIC
ENERGY POLICY INITIATIVES CENTER
UNIVERSITY OF SAN DIEGO SCHOOL OF LAW

The Energy Policy Initiatives Center (EPIC) is a research center of the USD School of Law that studies energy policy issues affecting California and the San Diego region. EPIC's mission is to increase awareness and understanding of energy- and climate-related policy issues by conducting research and analysis to inform decision-makers and educating law students.

Climate Collaborative
SAN DIEGO REGION

The San Diego Regional Climate Collaborative (SDRCC) was established in 2011 as a network for public agencies to advance comprehensive solutions to facilitate climate change planning. SDRCC serves as a resilience hub and a catalyst for collaborative, cross-jurisdictional work to share expertise and leverages resources in the San Diego region.

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Inaugural Funding & Foundational Program Partners

San Diego Community Power
(Community Power)

San Diego Gas & Electric
(SDG&E)

Program Sponsors

Clean Energy Alliance

San Diego Regional Energy Academy

Program Overview

The San Diego Regional Energy Academy is an in-person, multi-day program that aims to elevate the “Energy IQ” of San Diego’s community leaders. Program content is designed to increase participants knowledge and literacy of our region’s complex energy landscape.

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Program Goals

During the program, participants:

- Explore core energy principles and their application on the ground
- Understand the San Diego region’s power and energy system
- Assess and explore the intersections between energy, climate impacts, and equity
- Gain insights on how electrification and decarbonization can help build community resilience
- Participate in field trips to engage with key learning concepts directly

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Providing Multiple Benefits to the Region

- **Networking and Collaboration:** The Academy is open to multi-sectoral community leaders and aims to support participant collaboration and networking. Graduates of the program will also have the opportunity to join the Energy Academy Alumni Network.
- **Capacity Building:** The Academy will fill knowledge gaps regarding the complexities of the energy landscape to equip participants to support and implement energy programs.
- **A Just Transition:** The Academy will provide access to resources free of charge to promote diverse participation in the energy sector to ensure a more just transition.
- **Advancing Climate Action:** The Academy will support the ability of community leaders to influence energy policies and promote equitable climate solutions.

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Expanding Impact: Energy Academy Alumni Network

- Ongoing & Sustained Engagement: Graduates of the Energy Academy join a growing network of leaders who remain connected to one another through professional development opportunities, regional events, and peer learning.
- Cross-Sector Collaboration: Alumni represent a wide range of sectors including local and state agencies, nonprofits, tribal-serving organizations, and private industry–enabling diverse cross-sector partnerships.
- Continued Learning: Future phases of the program will include alumni mixers, issue-specific workshops, and a dedicated LinkedIn group to support knowledge sharing and career growth.
- Regional Impact: The alumni network strengthens regional leadership capacity and helps sustain momentum toward San Diego's clean energy and climate resilience goals.

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By the Numbers

- After completion of the program and 100% of past participants would recommend the Energy Academy to a colleague
- The first four cohorts have provided energy education programming to 120+ diverse regional leaders across a broad range of sectors
- We received 400+ applications across the first four cohorts, showing high demand and broad interest in the program; each cohort has ~30-35 students

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Energy Landscape in San Diego Region

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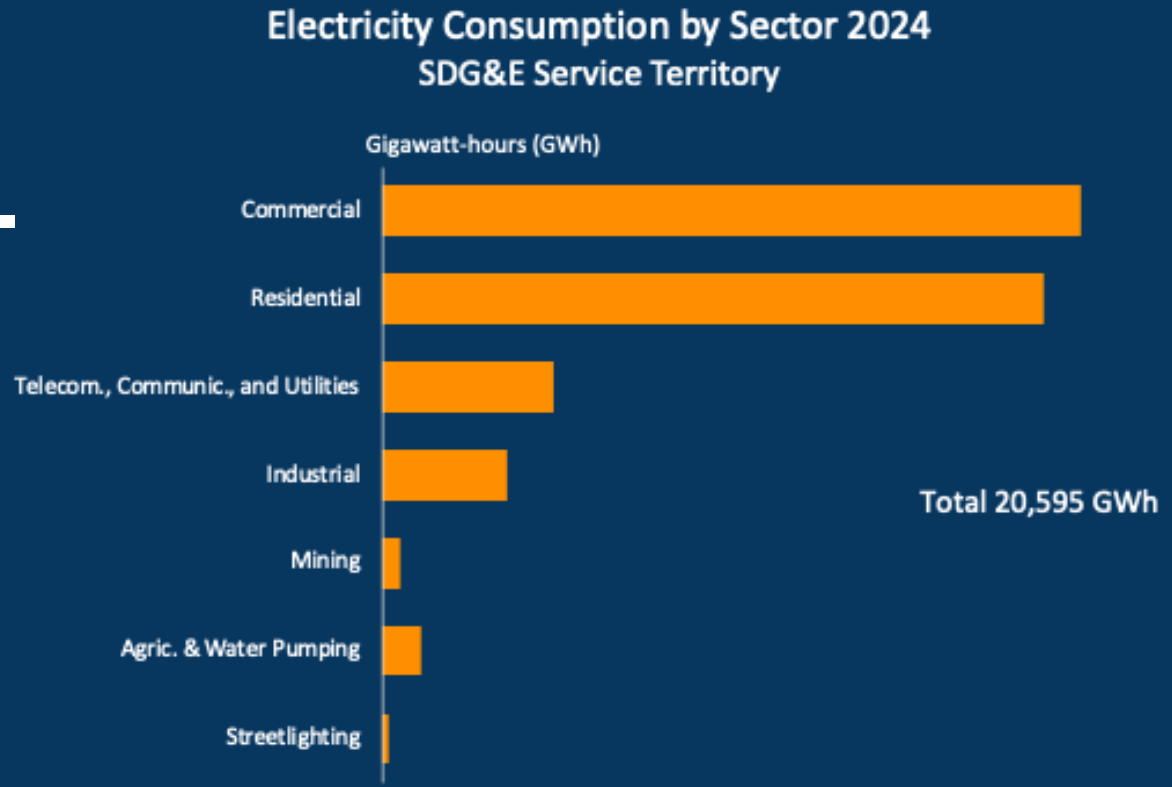
Electricity End-Use Sectors

Relatively low energy use compared with other California counties, due to milder year-round climate

Commercial and residential sectors consume about 80% of electricity

Low industrial usage compared to other regions (e.g., Los Angeles)

Breakdown is similar in natural gas use



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Source: California Energy Demand Forecast, 2025 - 2045 Baseline 'Mid' Forecast, Jan 2026

The Electric Power System

SDGE™ CEA

SAN DIEGO COMMUNITY POWER

Shell ENERGY

CALPINE ENERGY SOLUTIONS

SDGE™

SDGE™

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Climate and Energy Policy Impacts on Future Energy System

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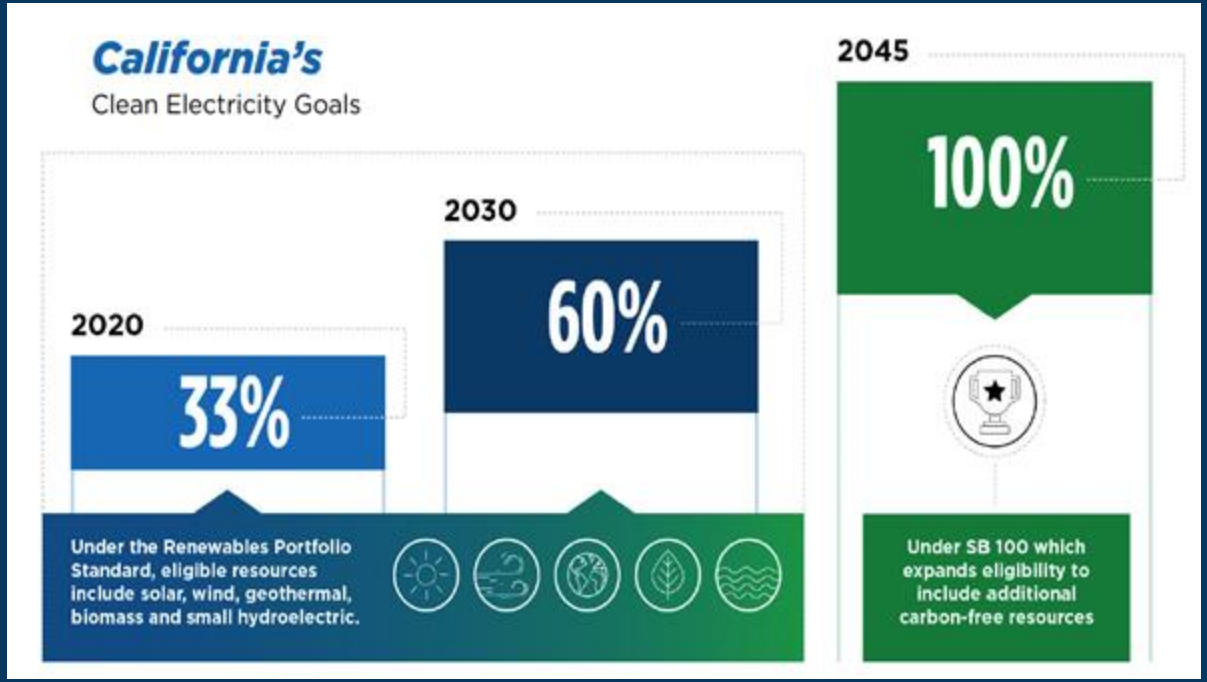
California law requires carbon neutrality and 100% carbon-free electricity by 2045

Key Points

An interim target: 60% of electric supply be from renewable sources by 2030

Renewable sources include solar, wind, geothermal, biomass, and small hydroelectric

Nuclear and large hydroelectric are considered carbon-free but are not renewable



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Source: California Energy Commission

About two-thirds of the electric supply in City of San Diego is carbon-free

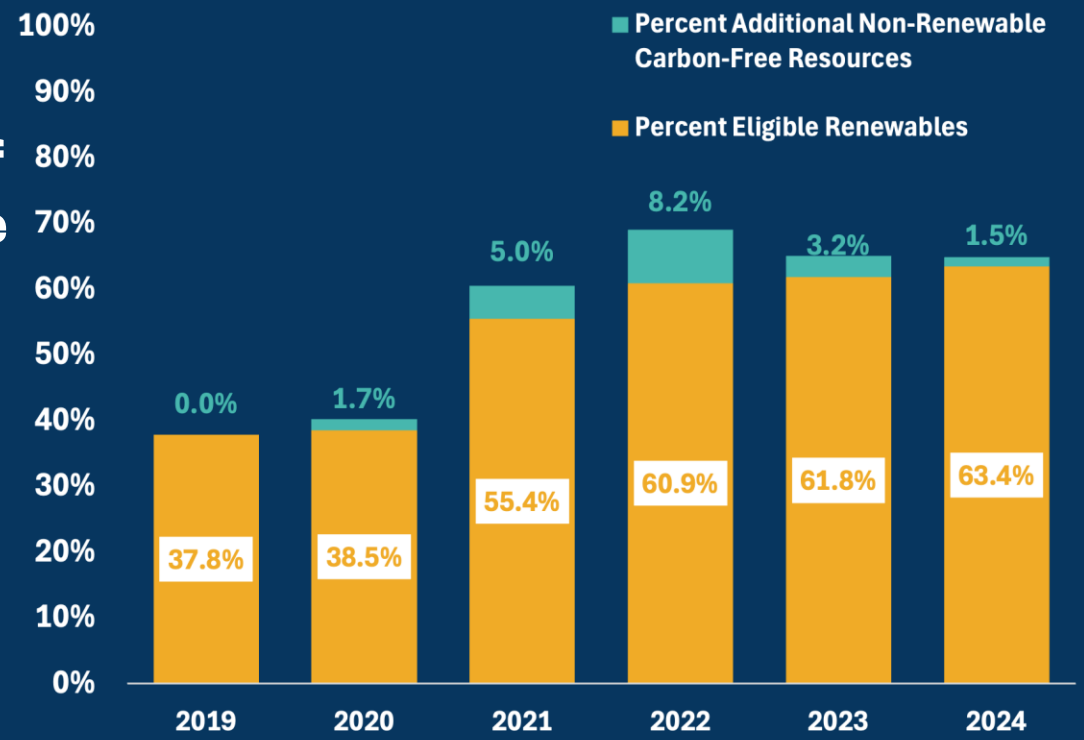
Key Points

SDG&E and Community Power all offers higher than state mandated renewable power

Coal has been nearly phased-out

Remaining portion is still from fossil fuels (natural gas and market purchase)

Large hydroelectric supply varies by year depending on rainfall and could be affected by climate change



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Source: City of San Diego Climate Action Plan Annual Reports, Energy Policy Initiatives Center, USD

Local Energy System Challenges

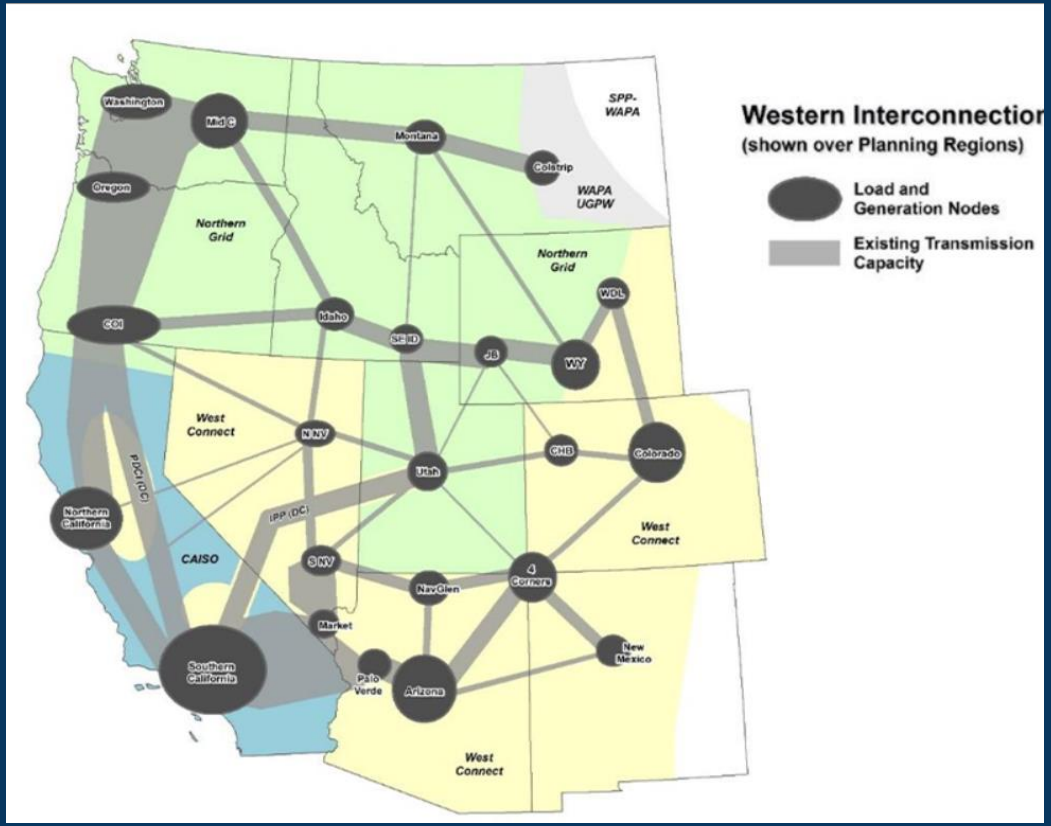
Key Points

We need a significant amount of new renewable generations to meet energy demand

San Diego has capacity and geographical constraints - unique position as an 'island'

Limited connectivity with surrounding areas

Local resources are critical



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Some Ways Climate Impacts Affect the Electric System

- Wildfires
  - Damage infrastructure
  - Affect transmission
  - Affect solar generation
- Heat waves increase demand
- Flooding could threaten infrastructure
- Drought lowers hydroelectric supply

California grid manager foresees $7B in upgrades in next decade

The Independent System Operator says the proposed build-out is needed, but it comes as ratepayers complain of rising power bills

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Source: San Diego Union Tribune. See https://www.sandiegouniontribune.com/2026/04/09/california-grid-manager-foresees-7b-in-upgrades-in-next-decade/

Local Resources are Critical in Maintaining a Resilient Energy System

Rooftop Solar

Significant increase in rooftop solar capacity in the last two decades

Customers are incentivized to add storage with solar, e.g., Community Power's Solar Battery Savings program

New rules mean customers receive less compensation for excess energy that they export back to the grid

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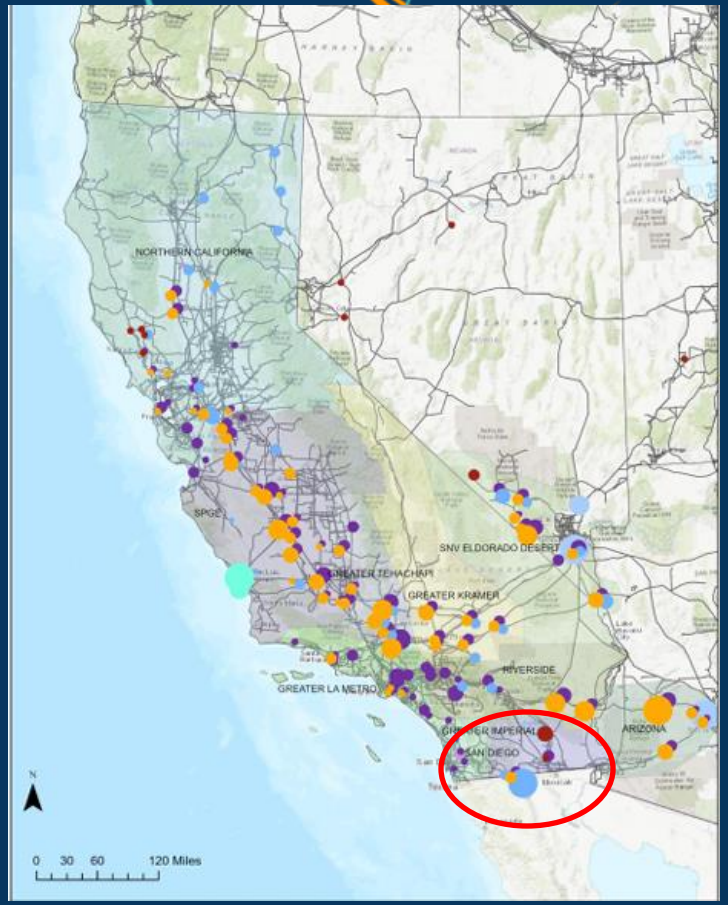
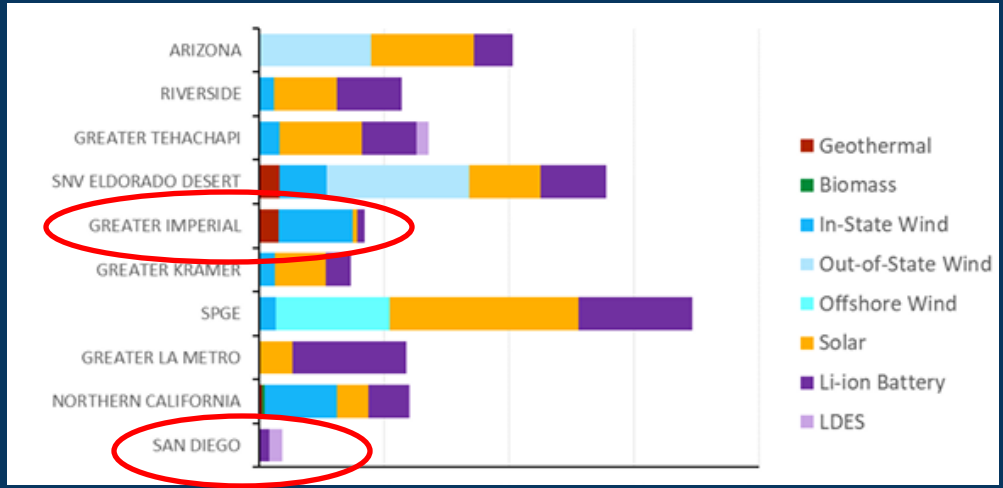
Source: California Energy Demand Forecast, 2025 - 2045 Baseline 'Mid' Forecast, Jan 2026

Local Resources are Critical in Maintaining a Resilient Energy System

Imperial Valley geothermal
Baja Wind
Urban Batteries
Solar (rooftop and large utility-scale)





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Thank You!

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